

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-63 (canceled).

Claims 64-65 (canceled).

Claims 66-93 (canceled).

94. (currently amended) The pharmaceutical composition comprising an ApoA-I agonist and a pharmaceutically acceptable carrier, excipient or diluent; wherein the ApoA-I agonist is in the form of an ApoA-I agonist-lipid complex said complex comprising an ApoA-I agonist and a lipid;

wherein the ApoA-I agonist comprises:

a 22 to 29-residue peptide or peptide analogue which forms an amphipathic α -helix in the presence of lipids and which comprises formula (I):

$Z_1-X_1-X_2-X_3-X_4-X_5-X_6-X_7-X_8-X_9-X_{10}-X_{11}-X_{12}-X_{13}-X_{14}-X_{15}-X_{16}-X_{17}-X_{18}-X_{19}-X_{20}-X_{21}-X_{22}-X_{23}-Z_2$

or a pharmaceutically acceptable salt thereof, wherein:

X_1 is Pro (P), Ala (A), Gly (G), Gln (Q), Asn (N), Asp (D) or D-Pro (p);

X_2 is an aliphatic residue;

X_3 is Leu (L) or Phe (F);

X_4 is an acidic residue;

X_5 is Leu (L) or Phe (F);

X_6 is Leu (L) or Phe (F);

X_7 is a hydrophilic residue;

X_8 is an acidic or a basic residue;

X_9 is Leu (L) or Gly (G);

X_{10} is Leu (L), Trp (W) or Gly (G);

X_{11} is a hydrophilic residue;

X_{12} is a hydrophilic residue;

X_{13} is Gly (G) or an aliphatic residue;

X_{14} is Leu (L), Trp (W), Gly (G) or Nal;

X₁₅ is a hydrophilic residue;

X₁₆ is a hydrophobic residue;

X₁₇ is a hydrophobic residue;

X₁₈ is Gln (Q), Asn (N) or a basic residue;

X₁₉ is Gln (Q), Asn (N) or a basic residue;

X₂₀ is a basic residue;

X₂₁ is an aliphatic residue;

X₂₂ is a basic residue;

X₂₃ is absent or a basic residue;

Z₁ is H₂N- or RC(O)NR'-;

Z₂ is -C(O)NRR, -C(O)OR or -C(O)OH or a salt thereof;

each R is independently -H, (C₁-C₆) alkyl, (C₄-C₆) alkenyl, (C₄-C₆) alkynyl, (C₃-C₂₀) aryl, (C₆-C₂₆) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl or a 1 to 7-residue peptide or peptide analogue in which one or more bonds between residues 1-7 are independently a substituted amide, an isostere of an amide or an amide mimetic;

each R' is independently -H, (C₁-C₆) alkyl, (C₄-C₆) alkenyl, (C₄-C₆) alkynyl, (C₅-C₂₀) aryl, (C₆-C₂₆) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl; and

each "—" between residues X₁ through X₂₃ independently designates an amide linkage, a substituted amide linkage, an isostere of an amide or an amide mimetic;

or

a N-terminally blocked form, a C-terminally blocked form, or an N- and C-terminally blocked form of formula (I).

95. (previously presented) The pharmaceutical composition of Claim 94 wherein X₇ of the ApoA-I agonist is a basic residue.

96. (previously presented) The pharmaceutical composition of Claim 94 wherein X₃, X₆, X₉ and X₁₀ of the ApoA-I agonist are hydrophobic residues.

97. (previously presented) The pharmaceutical composition of Claim 94 wherein the ApoA-I agonist is a 22-23 residue peptide or peptide analogue according to formula (I).

98. (previously presented) The pharmaceutical composition of Claim 97 comprising an ApoA-I agonist according to formula (I) wherein:

the “—” between residues X_1 through X_{23} designates $-C(O)NH-$;

Z_1 is H_2N- ; and

Z_2 is $-C(O)OH$ or a salt thereof.

99. (previously presented) The pharmaceutical composition of Claim 98 comprising an ApoA-I agonist according to formula (I) wherein:

X_1 is Pro (P), Ala (A), Gly (G), Asn (N), Gln (Q), Asp (D) or D-Pro (p);

X_2 is Ala (A), Val (V) or Leu (L);

X_3 is Leu (L) or Phe (F);

X_4 is Asp (D) or Glu (E);

X_5 is Leu (L) or Phe (F);

X_6 is Leu (L) or Phe (F);

X_7 is Lys (K), Arg (R) or Orn;

X_8 is Asp (D) or Glu (E);

X_9 is Leu (L) or Gly (G);

X_{10} is Leu (L), Trp (W) or Gly (G);

X_{11} is Asn (N) or Gln (Q);

X_{12} is Glu (E) or Asp (D);

X_{13} is Gly (G), Leu (L) or Aib;

X_{14} is Leu (L), Nal, Trp (W) or Gly (G);

X_{15} is Asp (D) or Glu (E);

X_{16} is Ala (A), Nal, Trp (W), Leu (L), Phe (F) or Gly (G);

X_{17} is Gly (G), Leu (L) or Nal;

X_{18} is Gln (Q), Asn (N), Lys (K) or Orn;

X_{19} is Gln (Q), Asn (N), Lys (K) or Orn;

X_{20} is Lys (K) or Orn;

X_{21} is Leu (L);

X_{22} is Lys (K) or Orn; and X_{23} is absent or Lys (K).

100. (previously presented) The pharmaceutical composition of Claim 99 wherein X₂₃ of the ApoA-I agonist is absent.

101. (previously presented) The pharmaceutical composition of Claim 94 comprising an ApoA-I agonist according to formula (I) wherein one of X₁₈ or X₁₉ is Gln (Q) or Asn (N) and the other of X₁₈ or X₁₉ is Lys (K) or Orn.

Claim 102 (canceled).

103. (previously presented) The pharmaceutical composition of Claim 94 comprising an ApoA-I agonist selected from the group consisting of:

peptide 1	PVLDLFRELLNELLEZLKQKLK	(SEQ ID NO:1)
peptide 2	GVLDLFRELLNELLEALKQKLKK	(SEQ ID NO:2)
peptide 3	PVLDLFRELLNELLEWLKQKLK	(SEQ ID NO:3)
peptide 4	PVLDLFRELLNELLEALKQKLK	(SEQ ID NO:4)
peptide 5	pVLDLFRELLNELLEALKQKLKK	(SEQ ID NO:5)
peptide 6	PVLDLFRELLNEXLEALKQKLK	(SEQ ID NO:6)
peptide 7	PVLDLFKELLNELLEALKQKLK	(SEQ ID NO:7)
peptide 8	PVLDLFRELLNEGLEALKQKLK	(SEQ ID NO:8)
peptide 9	PVLDLFRELGNELLEALKQKLK	(SEQ ID NO:9)
peptide 10	PVLDLFRELLNELLEAZKQKLK	(SEQ ID NO:10)
peptide 11	PVLDLFKELLQELLEALKQKLK	(SEQ ID NO:11)
peptide 12	PVLDLFRELLNELLEAGKQKLK	(SEQ ID NO:12)
peptide 13	GVLDLFRELLNEGLEALKQKLK	(SEQ ID NO:13)
peptide 14	PVLDLFRELLNELLEALOQOLO	(SEQ ID NO:14)
peptide 15	PVLDLFRELWNELLEALKQKLK	(SEQ ID NO:15)
peptide 16	PVLDLLRELLNELLEALKQKLK	(SEQ ID NO:16)
peptide 17	PVLELFKELLQELLEALKQKLK	(SEQ ID NO:17)
peptide 18	GVLDLFRELLNELLEALKQKLK	(SEQ ID NO:18)
peptide 19	pVLDLFRELLNEGLEALKQKLK	(SEQ ID NO:19)

peptide 20	PVLDLFREGLNELLEALKQKLK	(SEQ ID NO:20)
peptide 21	pVLDLFRELLNELLEALKQKLK	(SEQ ID NO:21)
peptide 22	PVLDLFRELLNELLEGLKQKLK	(SEQ ID NO:22)
peptide 23	PLLELFKELLQELLEALKQKLK	(SEQ ID NO:23)
peptide 24	PVLDLFRELLNELLEALQKKLK	(SEQ ID NO:24)
peptide 25	PVLDFFRELLNEXLEALKQKLK	(SEQ ID NO:25)
peptide 26	PVLDLFRELLNELLELLKQKLK	(SEQ ID NO:26)
peptide 27	PVLDLFRELLNELZEALKQKLK	(SEQ ID NO:27)
peptide 28	PVLDLFRELLNELWEALKQKLK	(SEQ ID NO:28)
peptide 29	AVLDLFRELLNELLEALKQKLK	(SEQ ID NO:29)
peptide 123	QVLDLFRELLNELLEALKQKLK	(SEQ ID NO:123)
peptide 124	PVLDLFOELLNELLEALOQOLO	(SEQ ID NO:124)
peptide 125	NVLDLFRELLNELLEALKQKLK	(SEQ ID NO:125)
peptide 126	PVLDLFRELLNELGEALKQKLK	(SEQ ID NO:126)
peptide 127	PVLDLFRELLNELLELLKQKLK	(SEQ ID NO:127)
peptide 128	PVLDLFRELLNELLEFLKQKLK	(SEQ ID NO:128)
peptide 129	PVLELFNDLLRELLEALQKKLK	(SEQ ID NO:129)
peptide 130	PVLELFNDLLRELLEALKQKLK	(SEQ ID NO:130)
peptide 131	PVLELFKELLNELLDALRQKLK	(SEQ ID NO: 131)
peptide 132	PVLDLFRELLNELLEALQKKLK	(SEQ ID NO:132)
peptide 133	PVLELFFERLLEDLLQALNKKLK	(SEQ ID NO:133)
peptide 134	PVLELFFERLLEDLLKALNQKLK	(SEQ ID NO:134)
peptide 135	DVLDLFRELLNELLEALKQKLK	(SEQ ID NO:135)
peptide 136	PALELFKDLLQELLEALKQKLK	(SEQ ID NO:136)
peptide 137	PVLDLFRELLNEGLEAZKQKLK	(SEQ ID NO:137)
peptide 138	PVLDLFRELLNEGLEWLKQKLK	(SEQ ID NO:138)
peptide 139	PVLDLFRELWNEGLEALKQKLK	(SEQ ID NO:139)
peptide 140	PVLDLFRELLNEGLEALOQOLO	(SEQ ID NO:140)
peptide 141	PVLDFFRELLNEGLEALKQKLK	(SEQ ID NO:141)
peptide 142	PVLELFRELLNEGLEALKQKLK	(SEQ ID NO:142)

and the N-terminal acylated and/or C-terminal amidated or esterified forms thereof, wherein X is Aib; Z is Nal; and O is Orn.

104. (previously presented) The pharmaceutical composition of Claim 103 comprising an ApoA-I agonist that is SEQ ID NO: 4.

Claims 105-109 (canceled).

110. (previously presented) The pharmaceutical composition of Claim 94 comprising an ApoA-I agonist wherein X₃ is Leu (L) or Phe (F), X₆ is Phe (F), X₉ is Leu (L) or Gly (G), and X₁₀ is Leu (L), Trp (W) or Gly (G).

Claims 111-127 (canceled).